

EFFECTIVENESS OF AN AT-HOME BASED PHYSICAL ACTIVITY INTERVENTIONS FOR FAMILIES WHO HAVE CHILDREN WITH INTELLECTUAL DISABILITIES

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This study was conducted to determine whether an at-home based activity intervention for families who have a child with an intellectual disability was an effective mean to increase motor skill ability and activity adherence.

Purpose: Specifically, investigators were interested in 1) determining whether weekly home-based visits improves motor skills (intervention group) more than those whose families received only weekly phone calls (attention group) and 2) determining factors that affected a family's adherence to the program. Physical activity literature involving children with intellectual disabilities suggests that behavior management, directed activity programming, and family intervention enhance adherence as well as sustainability of a new program. The authors anticipated that the intervention group would have greater adherence to an exercise program and exhibit improved scores on the gross motor quotient (GMQ), which is a numeric representation of the participant's overall score on the assessment.

Methods: The study was conducted with 16 families, eight in the intervention group and eight in attention group. Measures of efficacy include activity adherence (self-report) and pre/post motor skill performance on an assessment examining motor skills. **Results:** An independent t-test was conducted comparing scores from the pre- to the post- assessments between the attention and intervention groups. There were no significant differences between the scores for the attention group ($M=11.25$ $SD=9.177$) and the intervention group $M=20.25$, $SD=21.737$; $t(14) = -1.079$, $p=.3$ (two-tailed). However, the magnitude of the differences in the means (mean difference $= -9.0$, 95% CI: 26.892 to 8.892) showed that there was a moderate effect. **Conclusion:** The results of this study showed that there were no statistical significances between the improvements in the scores between both groups. However, although not statistically significant the intervention did have a moderate effect on the groups. The investigators were encouraged by the moderate effect of the intervention.

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